

## RECOVERY OF PALM PHYTONUTRIENTS

### ABSTRACT

5 A process for the recovery of phytonutrients such as carotenes, phospholipids and ubiquinones from palm oil esters is disclosed. This process comprises the steps of vacuum distillation, treatment and purification of concentrate containing these phytonutrients. The alkyl esters is subjected to at least one stage vacuum distillation at temperature from 80<sup>0</sup>C to 220<sup>0</sup>C and pressure less than 40mTorr. The carotenes  
10 concentrate is subjected to various physical and chemical treatments to yield higher carotenes concentration enriched with ubiquinones in indigenous diacylglycerols.